



Math + Technology = FUN!

Presented by:
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Access to general curriculum

- Where did this idea originate?
- Why has this idea persisted?
- Is there any research to support it?
- What happens to functional life skills?

IDEA 1997

- ALL students have access to general curriculum content
- ALL students are assessed on state standards (Creation of the Illinois Alternate Assessment)
- All?
- Content?
- What is an alternate assessment?

NCLB Regulations/ Guidance

- AYP: may use alternate assessment standards for up to 1% of Students with significant needs
- These standards must be based on academic content linked to grade level
- Really reading?
math? Science?

Student achievement happens when ...

- Students are engaged
- Students understand

Academics vs. Life Skills

- Both can be taught; both are important
- Academics can be taught in ways that are meaningful
- We do not know what students can learn until we try teaching the content
- Life skills are not a prerequisite to learning academics
- Students who are not disabled do not have to master all life skills to be eligible to learn to read; double standard
- Balance is needed in planning IEPs and developing daily schedule

Teaching to NCTM Standards: What really works?

- **5 Component Skills**

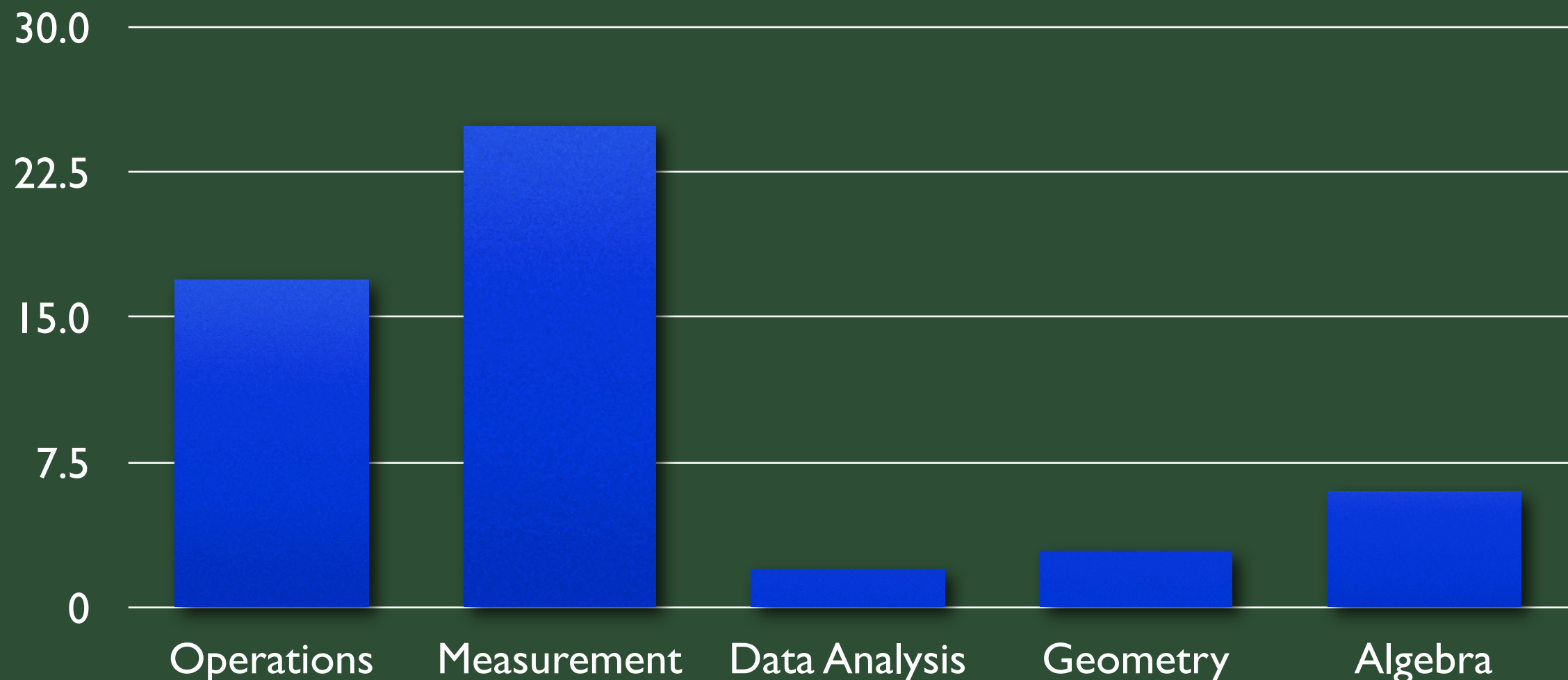
- **Number and Operations**
- **Geometry**
- **Algebra**
- **Data Analysis**
- **Measurement**

- **5 Processing Skills**

- **Problem Solving**
- **Reasoning & Proof**
- **Communication**
- **Connections**
- **Representation**

Math: Focus on Money

Literature Review Categories for Math
67 experiments (65 articles)



Browder, D., Spooner, F., Ahlgrim-Dezell, L., Harris, A. & Wakeman, S (2006). A comprehensive review of research to teach math to students with significant cognitive disabilities. *Exceptional Children*.

NCTM Principals of Math Instruction

- Equity

- Curriculum

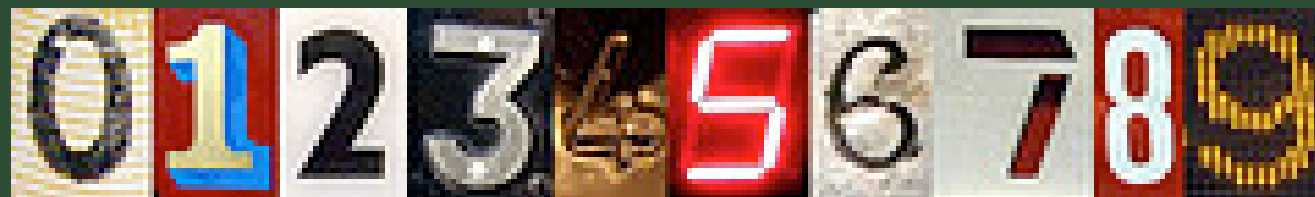
- Teaching

- All students must have opportunity and support to learn mathematics
- Coherent, focused on important mathematics, well articulated across the grades . . prepare students to solve problems across settings
- Selecting suitable materials, tools, techniques to support learning & pursuing continuous self improvement



NCTM Principals of Math Instruction

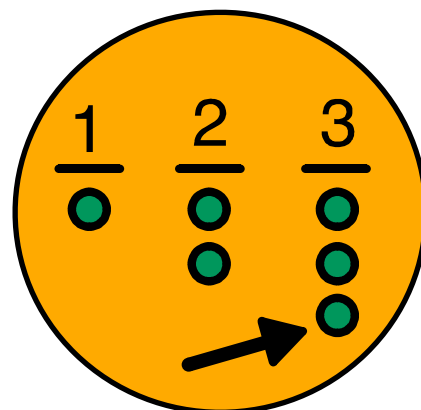
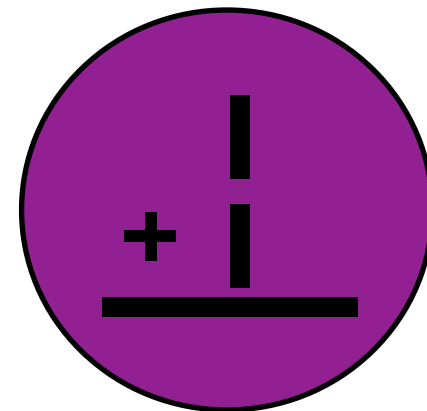
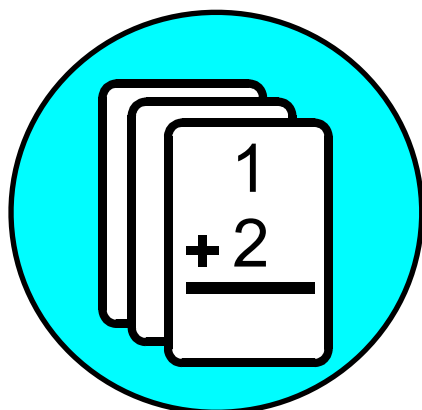
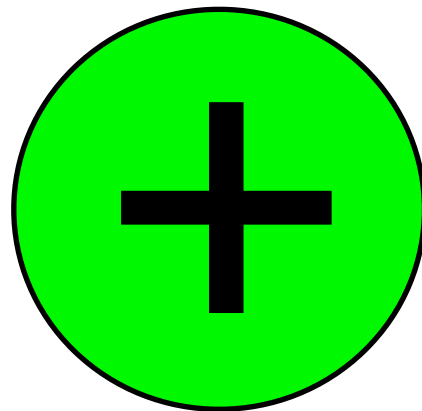
- Learning
 - Build new knowledge from prior knowledge: students learn more and better when they take control of their learning
- Assessment
 - Integral part of instruction . . . guides student learning
- Technology
 - Technology is essential in teaching and learning



Story Based Math

- University of North Carolina
- Charlotte
- Attainment's Teaching to
Standards Math

Algebra: Addition





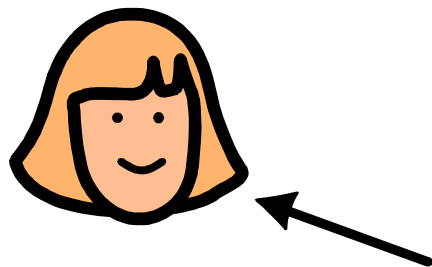
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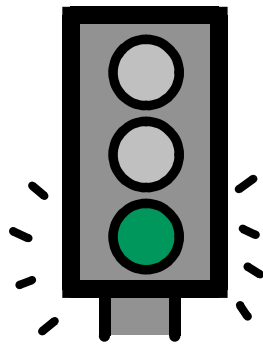
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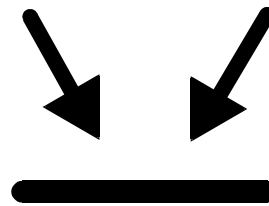
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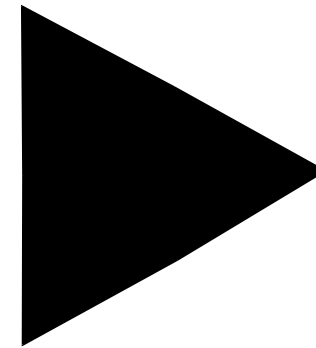
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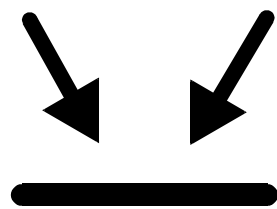
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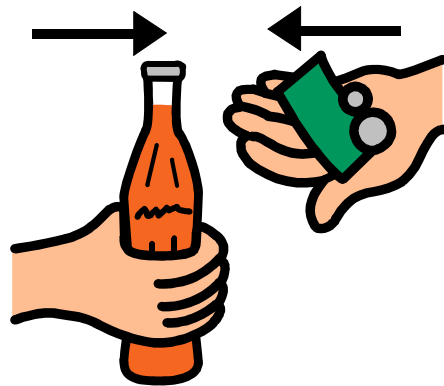
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store



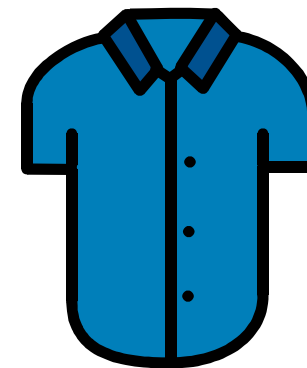
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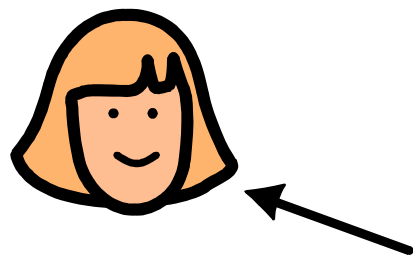
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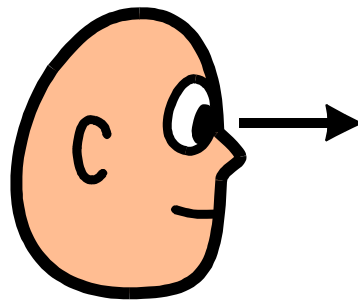
Spiderman



shirts.



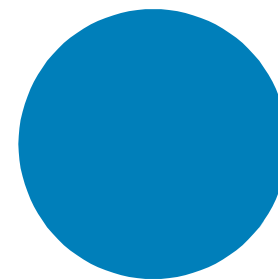
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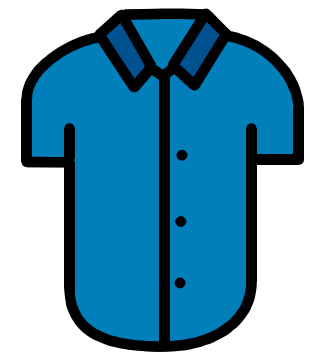
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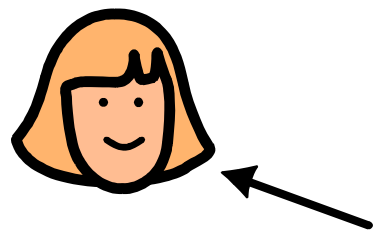
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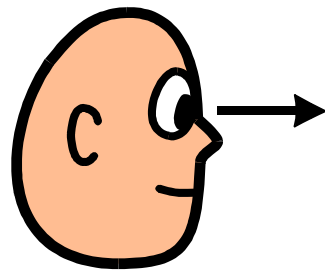
blue



shirt.



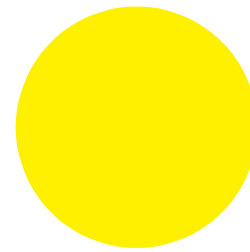
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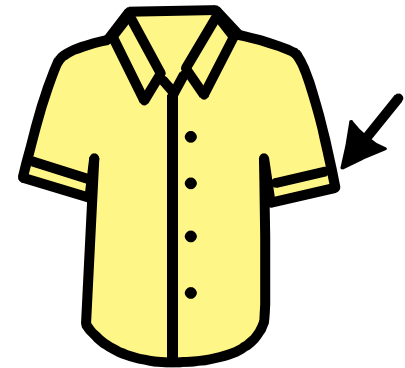
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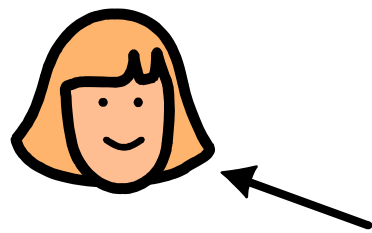
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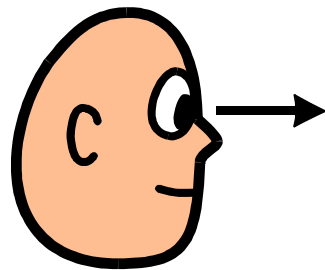
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shirt.



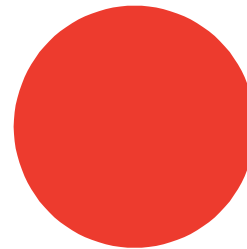
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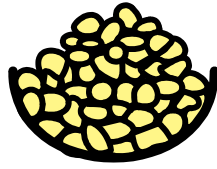
red



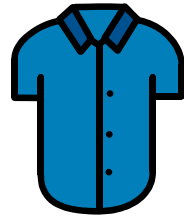
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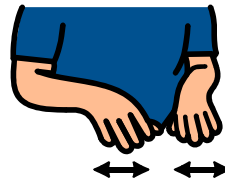
How



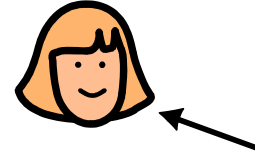
many



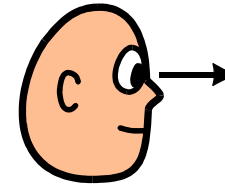
shirts



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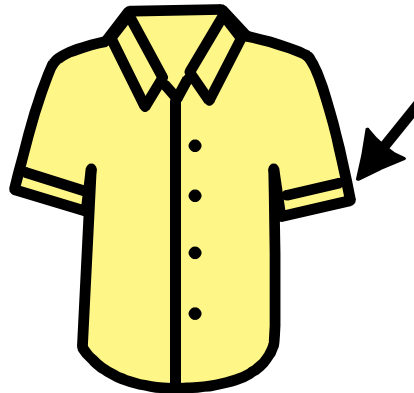


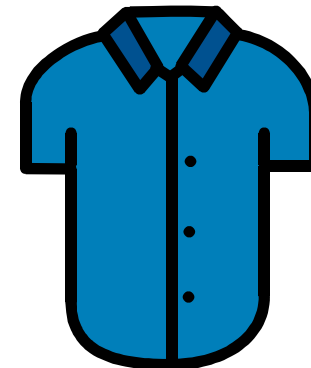
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see?

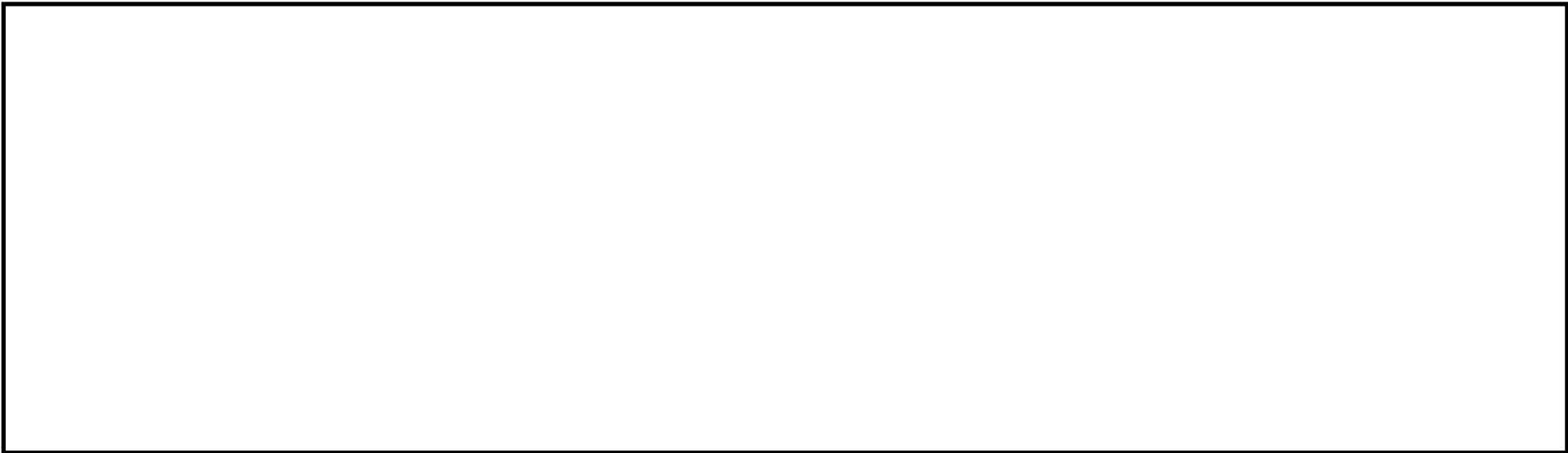






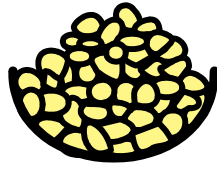
First Count the shirts and put the number on the line.

What is the problem?

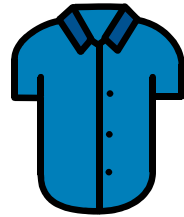
A large, empty rectangular box with a black border, intended for a user to write their answer to the question above it.



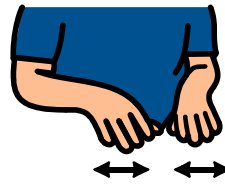
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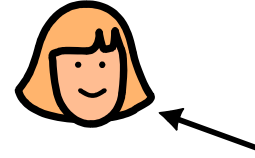
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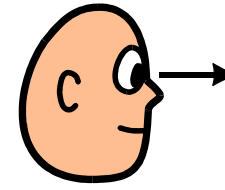
shirts



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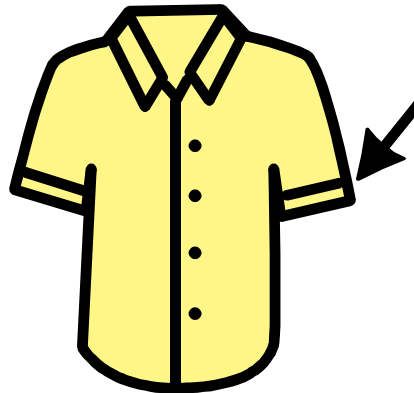


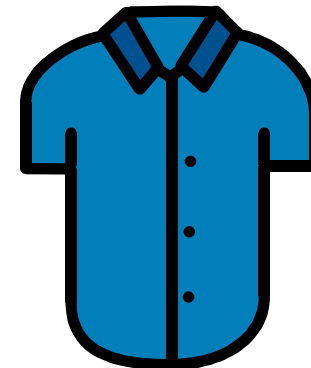
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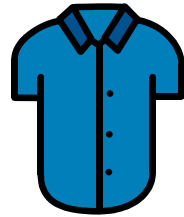
What order of operation would you use to solve the problem?



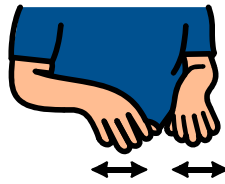
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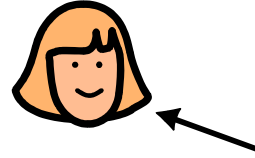
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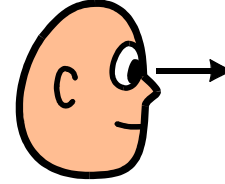
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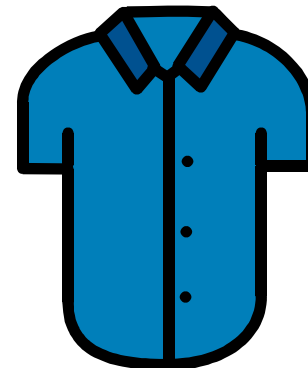
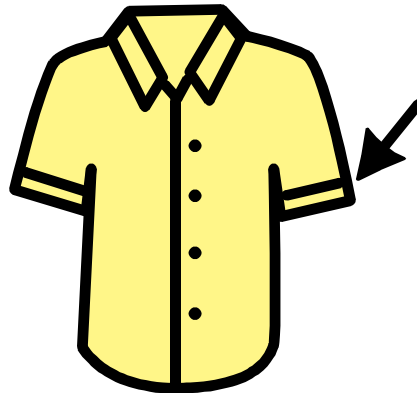
did



she



see?



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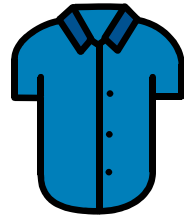
Solve the equation.



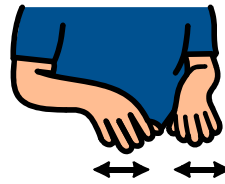
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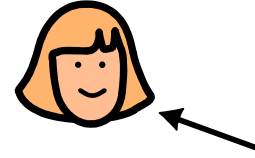
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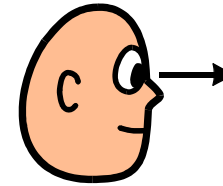
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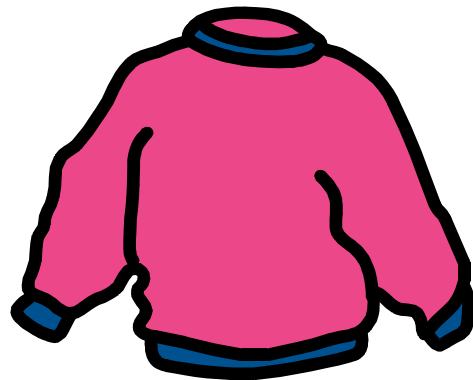
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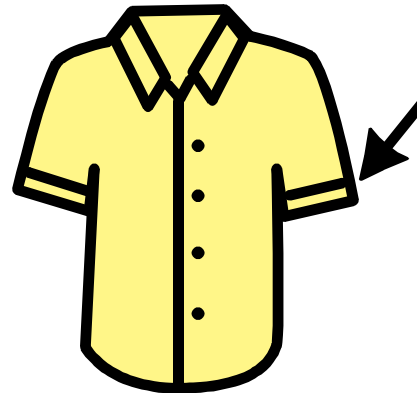
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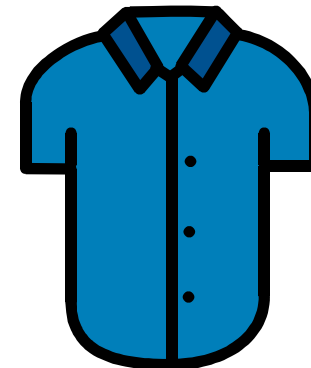
see?



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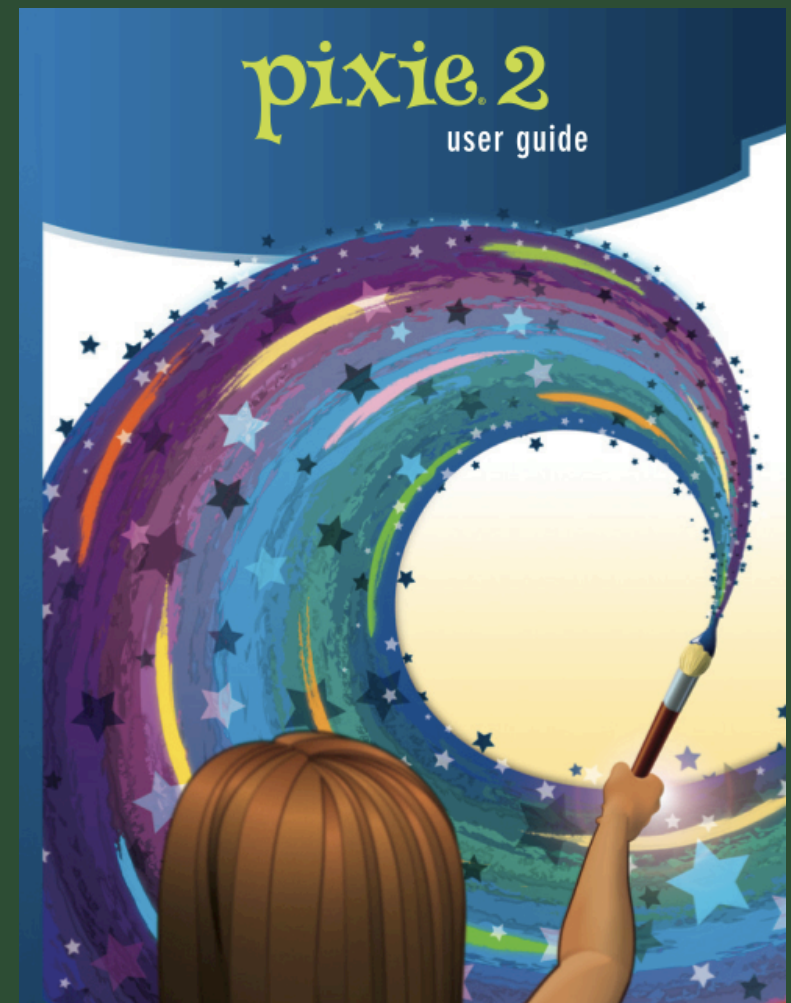


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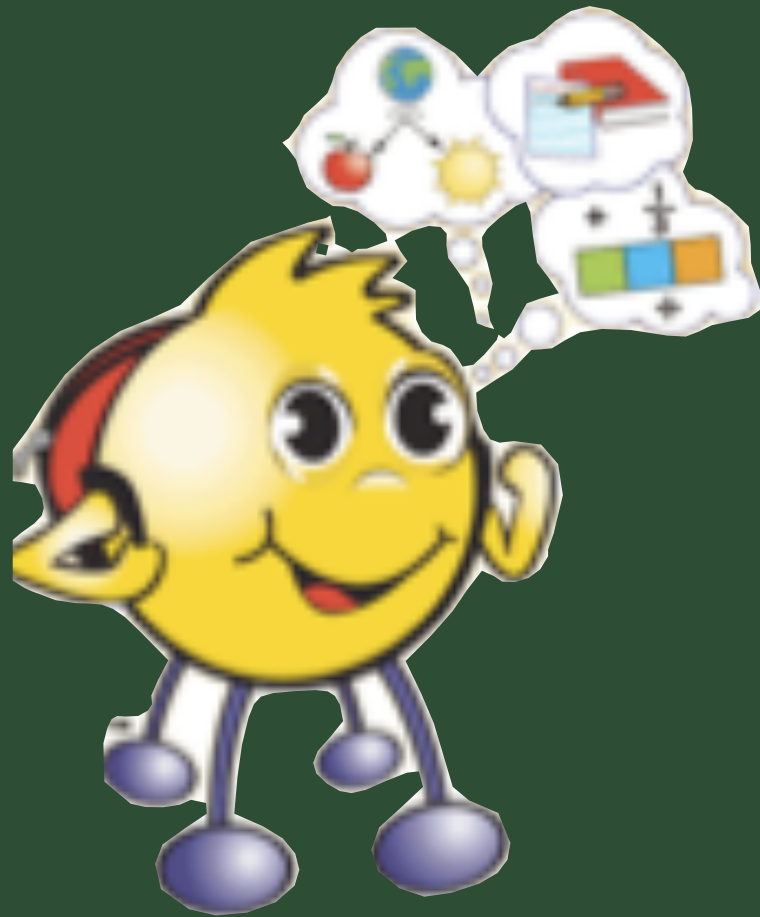
Answer (with label)

Pixie 2

- Templates
- Interactive Activities
- Balance (Teacher or Student Created)



Kidspiration



- Templates
- Math View



Comic Life

- Activites
- Visual Directions

Web 2.0 Tools

- www.delicious.com/sedol825/nclb